

## ABSTRAK

**Bronchodilator Utilization Study  
On Chronic Obstructive Pulmonary Disease (COPD) Patients  
(Study was done at SMF Paru RSUD Dr. Soetomo Surabaya)**

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**Backgrounds.** Chronic Obstructive Pulmonary Disease (COPD) is a lung disease characterized by airway obstruction that is continuous from the lungs, is not fully reversible.

**Objective.** The aim of this report was to identify patterns of use of bronchodilators in COPD patients, to describe the type, route, doses, frequency of use, as well as its use singly or in combination in patients with COPD, and Identify Drug Related Problems (DRP) associated with the use of bronchodilators in COPD patients.

**Methods.** This research was done observational descriptive retrospective. Retrieval of data samples with Time Limited Sampling method from 1 January to 31 December, 2015. The study was done in the Installation Information Technology RSUD Dr. Soetomo Surabaya from February to May 2016.

**Results.** The result show that from 38 patients, patterns of use bronchodilators the most widely used is  $\beta_2$ -agonists (92,1%). Class  $\beta_2$ -agonists are used that kind of short-acting include salbutamol oral route (2 mg and 4 mg) and the inhalation route (IH 100 mcg / puff, 2,5 mg vial, liquid IH 0,1%) and fenoterol HBr inhalation route (IH aerosol 100 mcg / puff, liquid IH 0,1%). The most combination bronchodilator therapy used are salbutamol + (budesonide-formoterol) (21%) and (budesonide-formoterol) + tiotropium + salbutamol (21%). Budesonide-formoterol (fixed combination) by the inhalation route with a power of 80 / 4,5 mcg or 160 / 4,5mcg (24 patients). Potential Drug Interactions occur in COPD patients at most that the interaction between salbutamol and formoterol (13 patients).

**Conclusions.** The pattern of bronchodilator are  $\beta_2$ -agonists (92,1%), anticholinergics (52,6%), methylxanthines (13,2%). Drug Related Problems (DRP) that occur are potential drug interactions.

**Keywords :** Bronchodilator, COPD, Drug Utilization Study